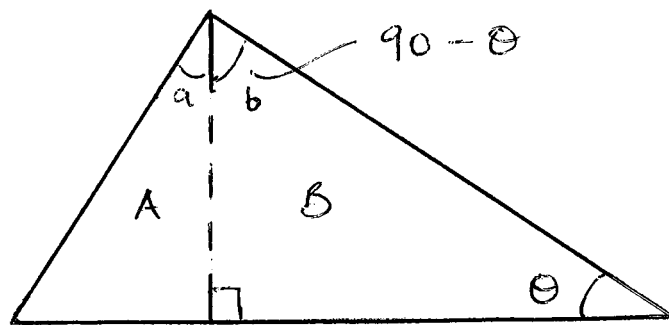


A LITTLE GEOMETRY NEVER KILLED ANYONE *



1. Δ s A and B are similar —

Angles of a Δ add up to 180° , so if A and B are right angled Δ s formed from a larger right angled Δ ...

- If we mark our 'slope' as θ
- angle $b = 180 - (90 + \theta)$
 $= 90 - \theta$

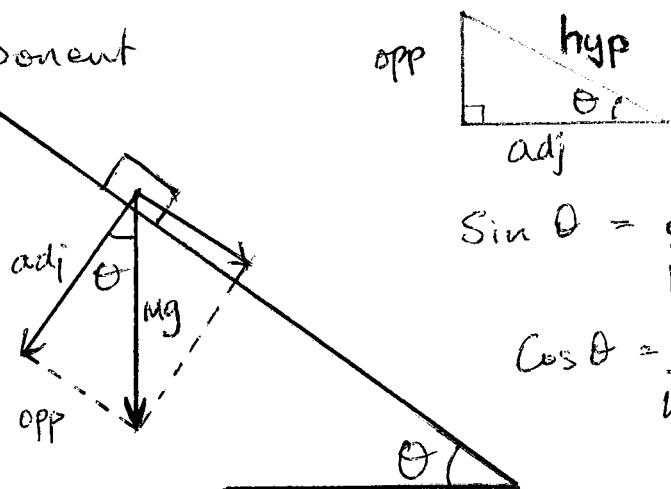
but $a + b = 90^\circ$, so $a = 90 - (90 - \theta)$
 $= \theta$

So A and B are similar right-angled triangles.

So The downslope component of the weight of a body on a slope of θ is:

$$mg \sin \theta$$

The inslope component is
 $mg \cos \theta$



$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

* Apart from the Thousands who died constructing the pyramids.